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# **Clinical Care Gap Analysis at Provincial and District Level**

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Abt Associates Inc.

Abt Associates Inc. ■ 4550 Montgomery Avenue, Suite 800 North  
■ Bethesda, Maryland 20814 ■ Tel: 301.347.5000 ■ Fax: 301.913.9061  
■ [www.abtassociates.com](http://www.abtassociates.com)

# **Clinical Care Gap Analysis at Provincial and District Level**

## **Co- authors**

Dr Chitalu Chilufya, Clinical Care Specialist - Luapula Province  
Dr Omega Chituwo, Clinical Care Specialist – Lusaka Province  
Dr Sindwa Kanyimba, Clinical Care Specialist - Western Province  
Dr Victoria Musonda, Clinical Care Specialist - Central Province  
Dr Robert Chipaila, Clinical Care Specialist - Northern Province  
Dr Kennedy Kapembwa, Clinical Care Specialist - Eastern Province

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## Abbreviations/Acronyms

AIDS	Acquired Immune-Deficiency Syndrome
ANC	Ante Natal Care
ART	Anti-retroviral therapy
BP	Blood Pressure
CCS	Clinical Care Specialist
CD4	A measure of Immunity level
CDE	Classified Daily Employees
CHC	Community Health Coordinator
CHN	Child Health and Nutrition
CHWk	Child Health Week
CIMCI	Community IMCI
COs	Clinical Officers
CPs	Cooperating Partners
CTC	Counseling Testing Care
CT	Counseling and Testing
CTX	Co-trimoxazole
DCT	Diagnostic Counseling and Testing
DHMT	District Health Management Team
DHO	District Health Office
DIM	District Integrated Meeting
DMO	District Medical Office
DPT,Hip,Hep	Diphtheria Pertussis Tetanus Haemophilus Hepatitis B vaccine
DTSS	Directorate of Technical Support Services
EID	Early Infant Diagnosis
EMONC	Emergency Obstetric and Newborn Care
EQA	External Quality Assurance
FANC	Focused Antenatal Care
FIMCI	Facility IMCI
FP	Family Planning
GRZ	Government of the Republic of Zambia
HAART	Highly Active Antiretroviral Therapy
HC	Health Centre
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPCZ	Health Practitioners Council of Zambia
HQ	Headquarters
HSSP	Health Services Systems Program
IMCI	Integrated Management of Childhood Illnesses
IPT	Intermittent Preventive Therapy
IQC	Internal Quality Control
IRH	Integrated Reproductive Health
IRS	Indoor Residual Spraying
ITG	Integrated Treatment Guidelines
ITN	Insecticide Treated Net
IUCD	Intra-Uterine Contraceptive Device
IYCF	Infant and Young Child Feeding

KGH	Kabwe General Hospital
LGH	Lewanika General Hospital
LMIS	Logistics Management Information System
MCH	Maternal Child Health
MCZ	Medical Council of Zambia
MDR	Multi Drug Resistance
MOs	Medical Officers
MOH	Ministry of Health
MS	Management Specialist
MTCT	Mother to Child Transmission of HIV
OPV	Oral Polio Vaccine
PA	Performance Assessment
PAC	Post Abortion Care
PCP	Pneumocystis Carrini Pneumonia
PCR	Polymerase Chain Reaction
PHO	Provincial Health Office
PITC	Provider Initiated Counseling and Test
PMTCT	Prevention of Mother to Child Transmission
QA/I	Quality Assurance/Improvement
RDT	Rapid Diagnostic Test
RED	Reach Every Child strategy
RHC	Rural Health Centre
SMAGs	Safe Motherhood Action Groups
STI	Sexually Transmitted Infection
TB	Tuberculosis
TPR	Temperature Pulse Respiration
TQM	Total Quality Management
TSS	Technical Support Supervision
UCI	Universal Child Immunization
UTH	University Teaching Hospital
ZISSP	Zambia Integrated Services Systems Program

## **1. Introduction**

Clinical Care in Zambia remains at the core of the Ministry of Health's vision, which is, provision of access to cost effective quality health care as close to the family as possible. Realizing that clinical care is an essential step in providing strong quality services, Abt Associates, through its implementing mechanism - Health Services and Systems Program, a project preceding the Zambia Integrated Systems Strengthening Program, began seconding Clinical Care Specialists (CCS) to the Provincial Health Offices. Clinical Care Specialists are physicians appointed to the Provincial Health Offices to help improve and expand clinical services in the interlinked areas of HIV/AIDS, malaria, Child Health, Family Planning, and EmONC in the provinces. The CCSs help organize and strengthen case management and service delivery at the provincial level. However, their work also extends "down" from that level through the district level, all the way to remote health clinics. The CCSs employed various innovative approaches in their work which include using principles of mentorship and the creation of clinical care teams (CCTs) to assure quality of services. CCSs took the lead in the expansion of the mobile ART outreach approach to deliver HIV treatment and other services, and build capacity in remote health facilities in all nine provinces of Zambia.

While significant strides were made to increase access to health care, a lot remained to be done to address the quality of care. In addition, the mandate of the clinical care specialists focused on HIV/AIDS services, though they still provided technical support in other clinical and public health thrusts, such as surgery, child and maternal health.

To build on the gains, and to address the scope of the mandate and the quality of care, ZISSP, has again seconded nine clinical care specialists to the provincial health offices. It is envisaged that the team will broaden clinical care support to HIV/AIDS, Malaria, EmONC, Family Planning and Child Health services. The team will spearhead the institutionalization of Quality Improvement programs at provincial and district levels. In collaboration with the Community Health Coordinators, also seconded to the provincial health offices, existing community structures for participation in HIV/AIDS, malaria, maternal and child health services in 27 districts will be strengthened.

The Clinical Care Specialists will also collaborate with the nine Management Specialists, seconded to the provinces to strengthen the management and leadership skills at provincial and district level of program officers

## **2. Purpose of report**

As an initial step, the Clinical Care Specialists are expected to conduct a gap analysis, in order to identify existing gaps in the clinical care functions at provincial and district level. The analysis was conducted in six provinces and the assumption was that the findings would be similar in the other three provinces (Copperbelt, North Western and Southern provinces) not represented at the time of data collection. Clinical Care Specialists for the three provinces had not been recruited at the time of the data collection. The results of the analysis will form the basis for developing strategies to address identified problems and to develop appropriate work plans.

## **3. Methodology**

The clinical care specialists reviewed previous performance assessment reports, technical support reports, minutes of the technical committee meetings, the sector advisory group reports, HMIS reports and annual action plans for the years 2009 and 2010. Key informant interviews were conducted with selected program officers at provincial and district level. In addition, observations were made during the routine performance assessment conducted in September and October 2010. The four CCSs who worked under the previous project, HSSP, also used their experiences in the previous project to identify the gaps at all levels of service delivery. However, to eliminate bias, this information was compared with the information gathered through interviews with the ministry of health Clinical Care Specialists and other program officers at provincial and district level.

## **4. Summary of findings, proposed strategies and recommendations**

### **4.1. Quality improvement**

#### **4.1.1 Performance Assessment**

The framework for Quality Improvement is generally weak. Performance assessment (PA) conducted biannually in the provinces and districts and lacks focus because preparatory meetings are not held to review the previous PA findings. HMIS is also not referred to for identification of weaker facilities and districts in specific indicators before the PA is carried out. While there was evidence in all the provinces assessed of bi-annual PA being conducted, it was observed that there was limited understanding of the PA tools at both provincial and district level. The DHMTs usually conduct their routine PA in all their health facilities before the provincial assessment is done. It was observed that there was almost always a discrepancy in the findings by the DHMTs, which showed inadequate detail despite the use of exactly the same tool with the province. The reports produced following the PA exercise were not uniform and some findings could not be replicated. This made it difficult for another person to use the report to provide technical support.

#### **4.1.2. Technical Support Supervision**

Technical support supervision (TSS) is provided to all districts and health facilities identified with weaknesses during PA. However, optimal technical support is rarely done. It was observed that time assigned for this exercise by the provincial and the district teams was inadequate due to limited resources both human and financial. Another observation was that TSS lacked focus and in some cases was found not relevant to the gaps identified during PA. For example, where case management was found to be poor as reflected by the high case fatality rates in the under-five children, some program officers during technical support would sit with the DHMT, ask questions and tick whether the indicator had improved instead of providing mentorship in case management.

#### **4.1.3. Technical Committees and Performance Review**

Technical Committee meetings, that assess program performance, analyze root causes and advise on the design of the relevant interventions, were irregular and in some provinces non functional. This was due to limited analytical skills by some program managers at provincial and district levels. There was no



logical flow of processes that drive the improvement of quality of services and performance of health workers.

## **4.2. Clinical case management**

### **4.2.1. History and Physical Examination of patients**

Case management for Malaria and HIV/AIDS was compromised due to a critical shortage of clinicians leading to high patient workload and non adherence to standard guidelines and protocols e.g a Rapid Diagnostic Test (RDT) for malaria takes 15 minutes to read the results. Health workers neither spend adequate time to take a comprehensive history nor conduct detailed physical examination of the patient.

### **4.2.2. ART Service Delivery**

Updating clinical records in ART sites is not a standard practice by clinicians as a way of improving the quality of ART services. The annual CD4 monitoring in clients on ART was inconsistent for some patients while it was never performed in others until they presented with signs of clinical treatment failure, at which point, it becomes too late to offer effective treatment and care. This finding contributes to high mortality in AIDS patients, which should otherwise be avoided.

Adherence to ART is key to the success of the ART program at all levels. However, it was observed during PA that in some health facilities adherence to ART was below the national standard of 80%. Long distance to ART sites was also reported as one of the major contributors to poor adherence in rural areas.

### **4.2.3. PMTCT and Pediatric ART Services**

Access to ART by pediatric patients has continued to be a major challenge in the nation's efforts to ensure universal access to ART. Currently pediatric ART access in the country is less 10% in most institutions. This is due to inadequate follow-up and monitoring of HIV exposed babies enrolled in PMTCT during under-five clinics with failure to successfully administer Co-trimoxazole prophylaxis to HIV exposed babies with resultant high Case Fatality Rate (CFR) from pneumocystis carinii pneumonia (PCP). Another factor contributing to low Pediatric ART uptake is the lack of confidence by the clinicians to manage children on ART. The clinicians have not been adequately trained to manage pediatric ART. Further, the results revealed weak implementation of Early Infant Diagnosis (EID) due to loss to follow up of HIV- exposed babies enrolled to the PMTCT and Provider Initiated Counseling and Testing (PCT) programs.

### **4.2.4. Sexually Transmitted Infections**

Reference to standard protocols such as the Syndromic Management of Sexually Transmitted Infections is not made for specific conditions.

### **4.2.5. Integrated Management of Childhood Illnesses**

The main gap observed in this area was the inadequate health providers with knowledge and skills to manage children using the IMCI approach. The health of the child would therefore continue to be compromised if the districts were not saturated with trained staff. It was further observed that non

adherence to standard ambulatory treatment protocols was another hindrance to improved child care and this has been attributed to lack of supervision of Health workers at the primary health care level.

## 5. Maternal health

The main gap identified at the facility level is the inadequate skilled health providers who are trained to offer quality Emergency Obstetric and Neonatal Care (EmONC). Most health facilities especially in the rural districts are manned by unskilled staff including environmental health officers (EHTs) and Classified Daily Employees (CDEs) who lack skills for conducting safe delivery and managing neonatal and maternal resuscitation following delivery. The situation is further worsened by lack of basic equipment to support these services. This results in high neonatal and maternal mortality.

## 6. Child Health and Nutrition

Growth monitoring for the under-five has been hampered by the non availability of the newly introduced under-five cards which makes it difficult for health workers to monitor a child's growth pattern, some of whom present with severe malnutrition. Clinical care Specialists will work through the mentorship teams to provide effective case management although it has been observed in some districts that such children are readmitted later on due to inadequate food security at household level.

Expanded Program for Immunization coverage's which used to be high in most districts have dropped over the past 2 years due to inadequate funding to the DHMTs. The number of health posts for immunizations has been reduced to cover only those that can be funded by the DHMTs. This has contributed to the low immunization coverages by some health centres in the districts. Most children only catch up on their immunization schedule during the bi-annual Child Health Week.

## 7. Pharmacy

Drugs and therapeutics committees, meant to promote rational use of drugs and to guide procurement of drugs and logistics, do not meet regularly and in some districts are none functional. Clinical Care Specialists will coordinate with pharmacy specialists to strengthen or introduce drugs and therapeutics committees in all health facilities.

## 8. Selected functional areas, gaps and proposed interventions

Functional Area	Gaps	Proposed interventions
<b>I. Performance Improvement</b>	<ul style="list-style-type: none"> <li>Irregular or no technical support following performance assessment of districts.</li> <li>Irregular or no technical committee meetings that assess performance, analyze performance, and design interventions that would improve performance of the</li> </ul>	<ul style="list-style-type: none"> <li>Enhance the understanding of the Quality improvement cycle through a capacity building workshop for all provincial and district managers.</li> <li>Support provinces and districts in planning for, and implementing of, performance assessment, technical review meetings and technical support programmes.</li> </ul>

	<p>districts, hence the province.</p> <ul style="list-style-type: none"> <li>• Quality improvement programmes are either inadequate or absent.</li> </ul>	<ul style="list-style-type: none"> <li>• A Quality improvement package for primary health care will be designed. Defining minimum desired performance standards for primary health care services at various levels of service delivery will be the initial step; interventions that target the gaps noted, will be refined and implemented through strengthened clinical care teams. Indicators that track improvement in quality will be defined.</li> </ul>
<b>2. Clinical Case Management</b>	<ul style="list-style-type: none"> <li>• High client –clinical staff ratio(Poor staffing), coupled with poor staff attitude compromises quality of case management</li> <li>• Incomplete case history and examination</li> <li>• Non adherence to standard ambulatory treatment protocols in Tuberculosis, Malaria, Integrated Management of Childhood Illnesses and Adult Illnesses</li> <li>• Poorly constituted and passive Clinical Care Teams – poorly run or absolutely no mentorship programs</li> <li>• Nursing care protocols poorly implemented(non use or poorly filled drug charts; no nursing care plans)</li> <li>• Referral system has no functional feedback mechanism</li> <li>• Irregular or lack of Clinical meetings – no continuous learning programs</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen human resource retention programmes for rural areas</li> <li>• Constitute and strengthen clinical care teams at provincial and district level and institutionalize clinical mentorship programmes to strengthen case management. The multidisciplinary clinical care teams must address nursing care and all paramedical aspects of case management.</li> <li>• Institutionalize the process of updating standards of ambulatory care, including TB, STIs, ART, Malaria, and disseminating these through routine institutional meetings at provincial, district and facility level.</li> <li>• Strengthen the referral system to include feedback from referral centers, as a way of building capacity at lower levels of care.</li> <li>• Strengthen continuous learning through clinical meetings, as a key component of performance improvement</li> </ul>

<b>3. HIV/AIDS</b>	<ul style="list-style-type: none"> <li>• Poor coordination among partners supporting the health sector in HIV/AIDS services</li> <li>• Poor quality of inadequate access to HAART for rural communities; compromised quality of HIV/AIDS care.</li> <li>• Poor linkages between various HIV/ AIDS services and programs(TB/ART)</li> <li>• Early Infant diagnosis continues to elude most facilities; Provider initiated Testing and Counselling is not practiced in most facilities</li> <li>• Non implementation of revised Prevention of Mother to Child transmission of HIV (monotherapy, with nevirapine, is still practiced in various facilities; poor follow-up for HIV exposed babies )</li> <li>• Inadequate laboratory facilities to support HIV/AIDS services; sample referral mechanisms are weak.</li> </ul>	<ul style="list-style-type: none"> <li>• Revamp and strengthen provincial coordination bodies; this will facilitate leveraging of resources and creation of synergies that will ultimately contribute to improved HIV/AIDS services</li> <li>• Work with the ministry to formulate a comprehensive quality improvement programme for HIV/AIDS services, that will include laboratory services</li> <li>• Orientation of staff in TB/HIV collaborative activities</li> <li>• Orient staff in the key interventions of PITC, PMTCT and work with pharmacy and management personnel to ensure the flow of drugs and logistics</li> <li>• Engage districts to strengthen sample referral systems to facilitate early diagnosis and evaluation of patients</li> </ul>
<b>4. Malaria</b>	<ul style="list-style-type: none"> <li>• Malaria diagnosis is based on clinical grounds, and not supported by laboratory evidence(Rapid Diagnostic Tests, Microscopy)</li> <li>• Low insecticide treated nets (ITNs) coverage of pregnant mothers and children under 5 years</li> </ul>	<ul style="list-style-type: none"> <li>• Promote clinical meetings and clinical mentorship to address malaria case management</li> <li>• Work with MOH and other partners to ensure consistent supply of RDTs and ITNs</li> <li>• Work with community coordinators and health education officers to sensitize communities on the use of DHOs, other partners and communities to improve ITNs to prevent malaria</li> </ul>
<b>5. Family Planning</b>	<ul style="list-style-type: none"> <li>• Erratic supply of Family planning commodities, such as Depo-Provera</li> <li>• Inadequate numbers of staff trained in implant and IUCD insertion</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate with FP specialist, MOH and other partners to ensure consistent supply of contraceptives</li> <li>• Coordinate with FP specialist, MOH and other partners to build capacity for frontline health</li> </ul>

	<ul style="list-style-type: none"> <li>• Incomplete Family Planning registers</li> <li>• Low numbers of new family planning acceptors</li> </ul>	workers in long term family planning methods and data management
<b>6. EmONC</b>	<ul style="list-style-type: none"> <li>• Very few staff trained in Emergency Obstetric and Neonatal Care (EmONC)</li> <li>• Lack of neonatal resuscitation equipment such as resuscitators in delivery rooms and theatres</li> <li>• High still, neonatal and maternal death rates</li> <li>• Still and neonatal deaths not reviewed regularly</li> <li>• Low institutional deliveries and post natal attendance</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate with the EmONC specialist, MOH and other partners to train frontline staff in EmONC, and to procure equipment</li> <li>• Support district teams to review maternal and still deaths as a way of improving performance</li> </ul>
<b>7. Child Health and Nutrition</b>	<ul style="list-style-type: none"> <li>• Low numbers of staff trained in F-IMCI and in C-IMCI</li> <li>• Health workers not managing children according to IMCI guidelines</li> <li>• Community IMCI is limping in all the provinces</li> <li>• Low immunization coverage in remote districts in all the provinces.</li> <li>• New under-five cards not available at most centres</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate with child health specialist, MOH and other partners to train frontline staff in IMCI;</li> <li>• Promote the clinical mentoring approach to strength IMCI case management.</li> </ul>
<b>8. Pharmacy</b>	<ul style="list-style-type: none"> <li>• Drugs and therapeutics committees hardly meet.</li> <li>• No active pharmacovigilance activities reported</li> <li>• Drugs stored under inappropriate conditions in most districts(no or dysfunctional air conditioning)</li> <li>• Irrational use of drugs</li> </ul>	<ul style="list-style-type: none"> <li>• Provide support in revamping drugs and therapeutic committees</li> <li>• Train frontline health workers in pharmacovigilance and rational drug use</li> </ul>

## 9. Conclusion

The gap analysis exercise as a strategy for needs assessment has given direction and focus on high impact interventions that will be implemented in the interlinked areas of HIV/AIDS, malaria, child health and nutrition, EmONC and Family Planning. The clinical care specialists will continue to play a pivotal role in strengthening health care systems at provincial and district level. The clinical care team approach entails the involvement of the ministry of health staff, and inculcates a sense of sustainability from the onset. Mentorship, performance assessment, technical support, quality assurance committees will be part of the overall package of Quality improvement. Clinical care specialists will continue to pursue innovative approaches to support the government in its quest to improve access to quality health services as close as possible to the client.